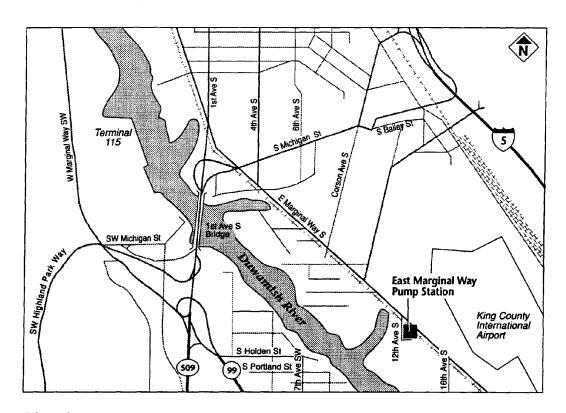
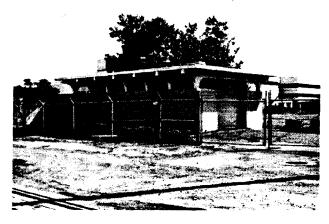
# EAST MARGINAL WAY PUMP STATION

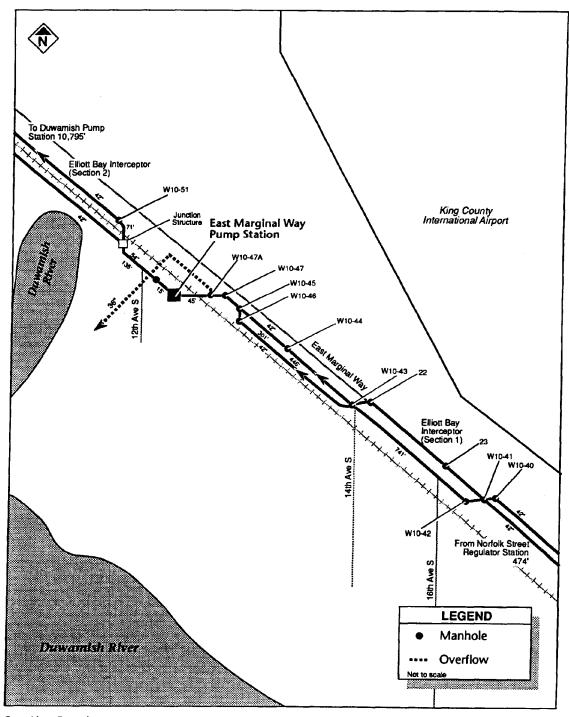
7319 E Marginal Way S, Seattle



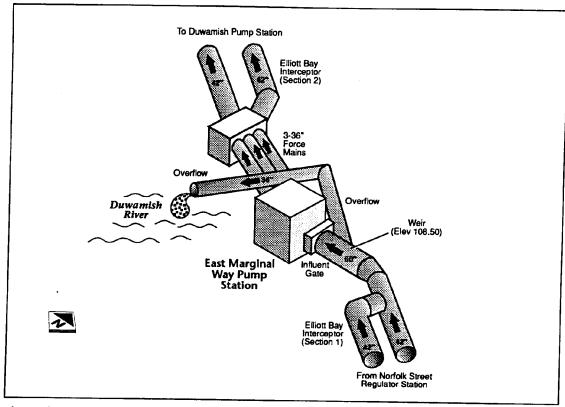
### **Directions**

The station is located on the west side of E Marginal Way S just north of 16th Avenue S. A Boeing sign is located across from the station on the east side of E Marginal Way S.





One-Line Drawing



Flow Schematic

### System Relationship

The station serves a 4,000-acre area, which includes the Boeing industrial complex. Wastewater flows from the east through the Henderson Street Trunk and the Norfolk Street Regulator Station. Wastewater is pumped through the station into the 54-inch-diameter Elliott Bay Interceptor and flows to the Duwamish Pump Station.

# Flow Information (mgd)

	<u> 1980</u>	<u>2000</u>
Average Dry Weather:	10.3	11.1
Average Wet Weather:	13.3	14.1
Peak (not including		
Seattle stormwater		
inflow):	27.6	30.0
Firm Pumping Capacity:	42.0	42.0

#### Critical Information

Emergency Power: Receptacle for generator

#### WARNING

Storage times represent the time allowed from shutdown to overflow under normal dry weather conditions. Storage times depend directly on weather conditions and condition of the pipes, and times must be adjusted accordingly.

Storage Time: 1 to 1-1/2 hours Overflow Elevation: 108.50 feet

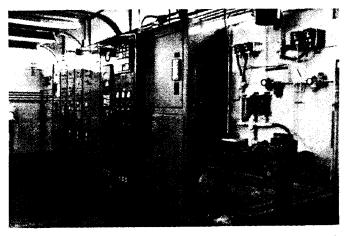
Overflow Location: Duwamish Waterway; through a 36-inch-

through a 36-inchdiameter overflow line about 300 feet west of

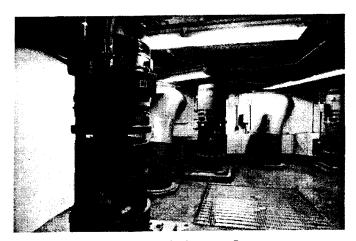
the station

Wet Well Grating Elevation:

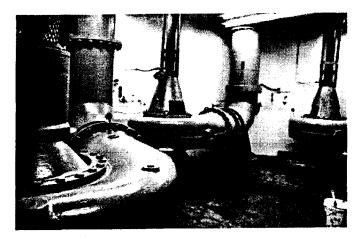
100.50 feet



Control Room (Control Panel, Instrument Air and Service Air)



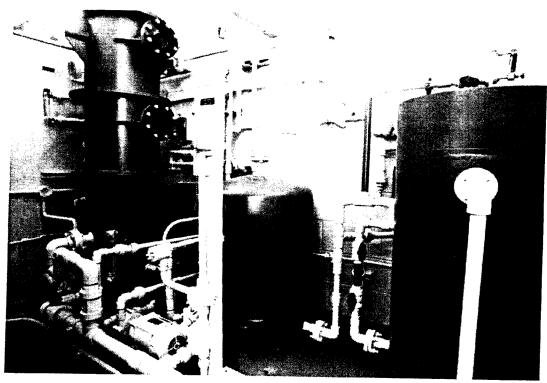
Motor Room (Motors, 24-inch-diameter Force Main Discharges)



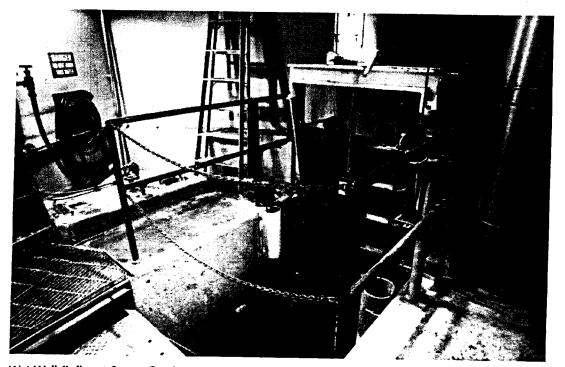
Pump Room



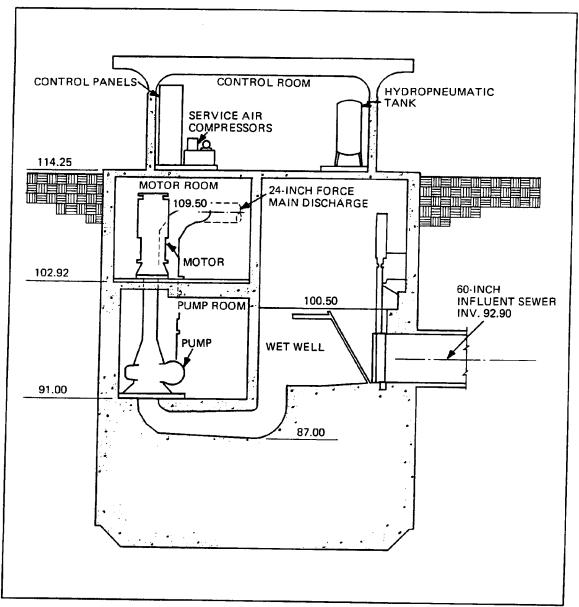
Explosive-Gas Monitor for Wet Well



**Odor Control System** 



Wet Well (influent Sewer Gate)



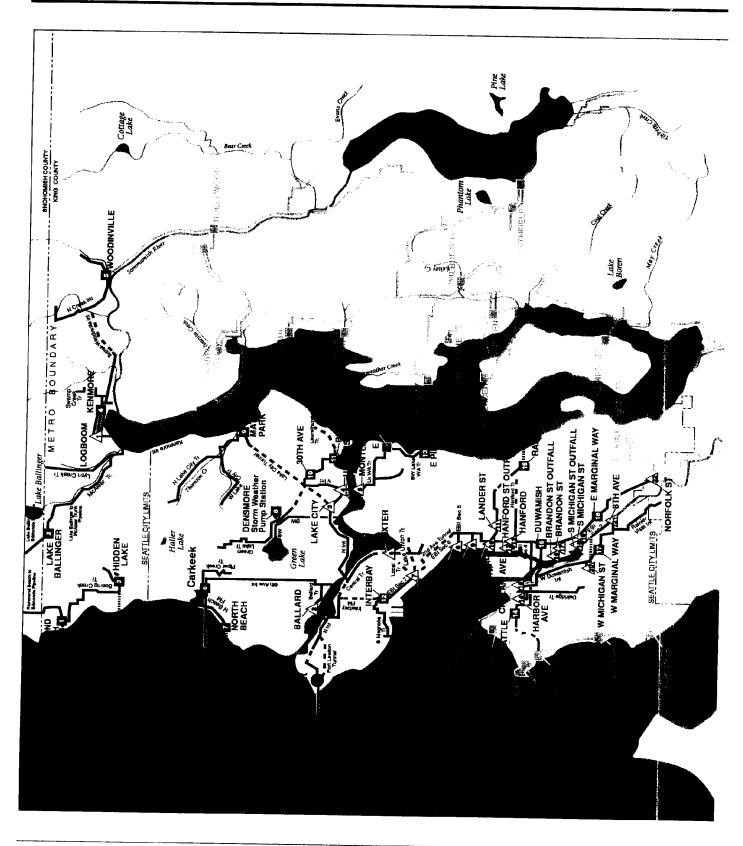
**Station Cross Section** 

Construction Info	rmation	
Contract	Date Complete	Cost
62-8: Built pump station; Austin Construction Co.	1/64	\$192,080
M3-74: Added third pump, increased capacity; Venture Construction	1/77	\$326,153

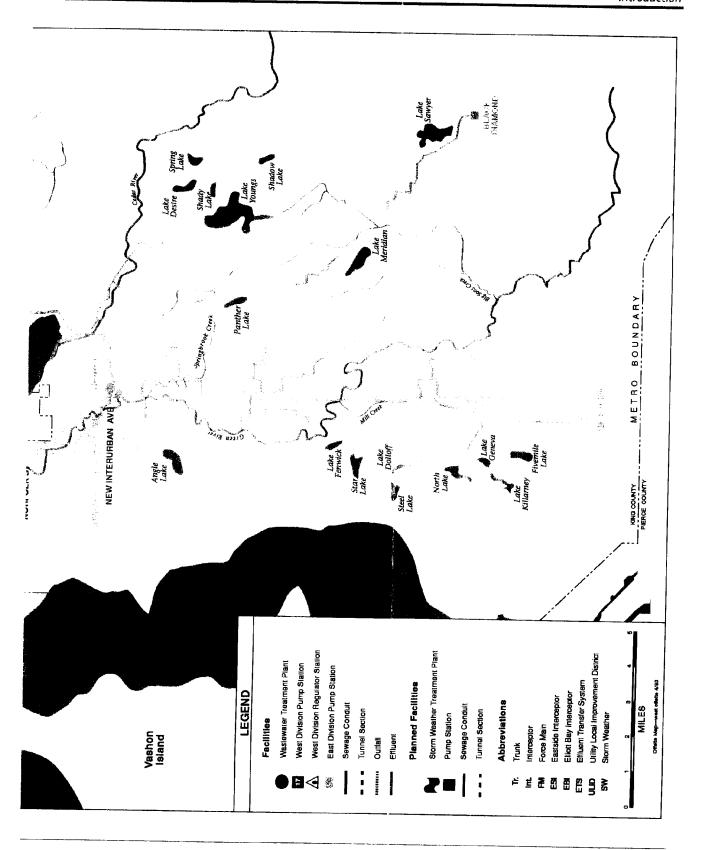
	Equipment Information
Components	Characteristics
	Gate System
Influent Gate	Armco, model 55-20; 42 in x 60 in; cast iron
Operator	Hydro-Line, model R2G; C2 water operated; operating water pressure: 150 psi; stroke: 60 in
Hand Pump	Wm. S. Pine Inc., series 2000, emergency gate operator; cat. no. 2000-12; C2 water operated; piston diameter: 1.5 in
	Raw Sewage Pump System (3 Units)
Pumping Unit 1	
Pump	Worthington, model 24NCMZ1; capacity: 6,960 gpm at 16.4 ft TDH; suction: 24 in; discharge: 24 in; impeller size:; s/n 1597736
Motor	General Electric, model 5K6325XC253A, type K, frame 6325P30; rating: 100 hp, 500 rpm, 460 V, 147 A, 3-phase; s/n ELJ528021
Electric Clutch	Electric Machinery, frame MBS20; rating: 92 hp, 190 V maximum; s/n 176095584
Pumping Unit 2	
Pump	Same as No. 1, except s/n 1597735
Motor	Same as No. 1, except s/n ELJ528020
Electric Clutch	Same as No. 1, except s/n 274212131
Pumping Unit 3	
Pump	Worthington, model 24MNZ; capacity: 16,000 gpm at 125 ft TDH; suction: 24 in; discharge: 25 in; impeller size: in; s/n 74-2001089-1
Motor	Same as No. 1, except s/n ELJ528022
Electric Clutch	Same as No. 1, except s/n 374212131

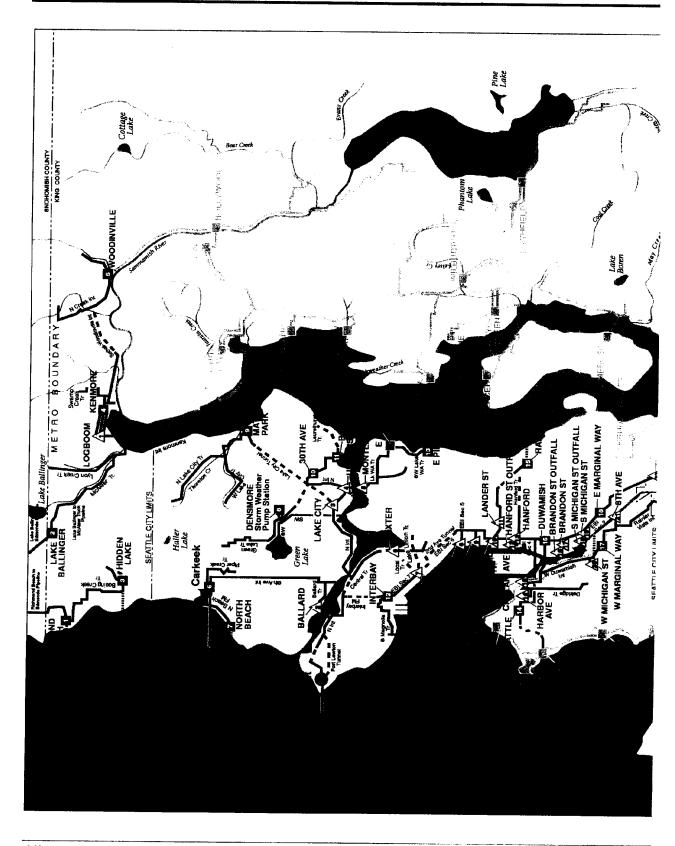
Eq	uipment Information (continued)
Components	Characteristics
	Electrical Systems
Utility Power	Seattle City Light
Control Battery Charger	Ratelco, model 2111K, type VR24122; output: 12 A, 24 Vdc
Batteries	Nife, model MDP-7, ni-cad; eighteen 1.42 V batteries connected in series
UPS	
	Water Systems
C1 Water	
Water Service	1-in incoming service; meter located in garden inside fence, 1 ft south of lettering on station
Backflow Preventer	Hersey-Beeco, model 6C; 1.5 in; s/n 1708
Sprinkler Timer	Telsco Weathermatic, model EM7-24; s/n 305049
C2 Water	
C2 Water Pumps (2)	Roth, model A256BF, turbine pumps; capacity: 20 gpm at 175 ft TDH; (1) s/n 132921, (2) s/n 145271
Motors (2)	Wagner, model 184-66481-00, type RPI, frame 184; No. ABD3V; rating: 2 hp, 1,750 rpm, 208/220/440 V, 6.2/3.1 A, 3-phase; (1) ID no. ABD3V, (2) ID no. AAL3S
	Compressed Air Systems
Service Air	
No. 1 Compressor	Ingersoll-Rand, model 222C4, type 30; rating: 110–130 psi; size 2.5 x 2.5 x 2.75; s/n 200329
Motor	General Electric, model 5K184AG201, frame 184; rating: 1.5 hp, 1,730 rpm, 220/440 V, 5.0/2.5 A, 3-phase
No. 2 Compressor	Same as No. 1, except s/n 205469
Motor	Westinghouse, model ABDP, frame 184; rating: 1.5 hp, 1,735 rpm, 220/440 V, 4.6/2.3 A, 3-phase
instrument Air	
Compressors (2)	ITT Pneumotive, model DTOGH715-T, double-ended, 4-cylinder; rating: 30 to 35 psi; s/n 180439P
Motors (2)	Century, frame M56Y, type SC; rating: 1.5 hp, 1,725/ 1,425 rpm, 230/460 V, 4.6/2.3 A, 3-phase; p/n 8-141003-01

Ec	quipment Information (continued)
Components	Characteristics
	Heating and Ventilation Systems
Air Handling Fan	McQuay, Seasonvent model LYF108Cl, 2-speed; capacity: 4,040 cfm; s/n 3FF00191
Motor	U.S., frame 145T, type T; rating: 1.0/0.5 hp, 1,800/900 rpm, 460 V, 3-phase; ID no. 9222
Heater	Trane, model GPA801005A, type 135-0504-4A, gas heater; s/n 3C-17362
Pump Room Transfer Fan	New York Blower, shop no. 24435, type B, size 122; capacity: cfm
Motor	Baldor, frame 49; rating: 0.33 hp, 1,725 rpm, 115 V, 1-phase; s/n W481
Wet Well Exhaust Fan	New York Blower, shop no. Z4435, type B, size 150; capacity: 2,260 cfm
Motor	Rating: 0.33 hp, 1,725 rpm, 115 V, 1-phase
	Drainage System
Sump Pump	
	Odor Control System
Pepcon System	
	Control System
PLC	
Bubblers (2)	
Metrotel II	
	Miscellaneous
Frolley Hoist	Yale, model KEL2-31P71/252, series KEL; capacity: 2 tons; s/n K107181D 2/75; motor rating: 1 hp, 1,700 rpm, 230/460 V, 3-phase
Chain Hoist	Yale, manually operated chain hoist (wet well); capacity: 0.5 ton
xplosive-Gas Monitor	Bacharach Instrument, model CD830P; s/n 7A03PC3



Offsite Facilities and Miscellaneous Structures, Volume 2, West Division





Offsite Facilities and Miscellaneous Structures, Volume 2, West Division

1-27 Ghelan Avenue Regulator Station 3455 Chelan Avenue Regulator Station 3455 Chelan Avenue SW, Seattle 5241 Emandon Street Regulator Station 5241 Emandon Street Regulator Station 5241 Emandon Street Seattle 6 1-273 South Michigan Street, Seattle 6 59 S Michigan Street, Seattle 6 50 S Michigan Street, Seattle 7 50 S Portland Stations 7 50 S S S S S S S S S S S S S S S S S S	Page	Regulator Stations	g.	Page F	Regulator Stations, continued	ď	age I	Page Pump Stations, continued
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